The deep-water Calappidae, Matutidae and Leucosiidae of the Solomon Islands, with a description of a new species of *Euclosia* Galil, 2003 (Crustacea, Decapoda, Brachyura)

Bella S. GALIL

National Institute of Oceanography, Israel Oceanographic and Limnological Research, P.O.B. 8030, Haifa 31080 (Israel) bella@ocean.org.il

Galil B. S. 2007. — The deep-water Calappidae, Matutidae and Leucosiidae of the Solomon Islands, with a description of a new species of *Euclosia* Galil, 2003 (Crustacea, Decapoda, Brachyura). *Zoosystema* 29 (3): 555-563.

ABSTRACT

Nineteen

KEY WORDS
Crustacea,
Decapoda,
Calappidae,
Matutidae,
Leucosiidae,
Euclosia,
Pacific Ocean,
Solomon islands,
new species.

Nineteen species of calappid, matutid, and leucosiid crabs were identified from material collected during two MUSORSTOM expeditions conducted in 2001 and 2004 in deep waters off the Solomon Islands. The species are reported for the first time from these islands; for some, these records constitute a significant expansion of their known geographic and bathymetric range. One new species, *Euclosia vella* n. sp., is described and illustrated; it differs from the closely resembling *E. tornatilia* (Galil, 2003) and *E. unidentata* (de Haan, 1841) in its smaller size and absence of the reddish ocelli on the gastric region.

RÉSUMÉ

Les Calappidae, Matutidae et Leucosiidae d'eau profonde des îles Salomon et description d'une nouvelle espèce d'Euclosia Galil, 2003 (Crustacea, Decapoda, Brachyura).

Dix-neuf espèces de crabes Calappidae, Matutidae et Leucosiidae ont été identifiées dans le matériel récolté durant deux expéditions MUSORSTOM en 2001 et 2004 dans les eaux profondes au large des îles Salomon. Ces espèces sont mentionnées pour la première fois de cette région; pour certaines, ces mentions constituent une extension significative de leurs répartitions géographiques et bathymétriques. Une nouvelle espèce, *Euclosia vella* n. sp., est décrite et illustrée; elle diffère d'*E. tornatilia* (Galil, 2003) et d'*E. unidentata* (de Haan, 1841), auxquelles elle ressemble fortement, par sa taille plus petite et l'absence d'ocelles rougeâtres dans la région gastrique.

MOTS CLÉS
Crustacea,
Decapoda,
Calappidae,
Matutidae,
Leucosiidae,
Euclosia,
océan Pacifique,
îles Salomon,
espèce nouvelle.

INTRODUCTION

The Solomon Islands are part of a volcanic arc extending from New Ireland to Vanuatu and placed on the boundary of the Australian and Pacific tectonic plates. This geologically-active metallogenic zone contains a wealth of deep-sea mineral deposits. Yet unexploitable, recent advances in deep-sea technology, and the acquisition of seafloor exploration licenses covering 15 000 km² in the Bismark and Solomon seas and in the territorial waters of Papua New Guinea, have raised the specter of deep-sea mining in the region (www.nautilusminerals.com). To evaluate the likely impacts of exploration and mining requires knowledge of the biology, ecology, and biogeography of the fauna. Previous zoological expeditions to the Solomons had not ventured beyond their shallow reefs and mangrove estuaries (Challis 1969; Miller 1969; Wolff 1969; Gibbs 1971; Bruce 1980; Blaber & Milton 1990; Morrisey et al. 2003; Goggin 2004). The two MUSORSTOM expeditions conducted in 2001 and 2004 (SALOMON 1: Bouchet, Dayrat, Warén, Richer de Forges; SALOMON 2: Bouchet, Warén, Samadi) in deep waters off the Solomon Islands, are thus of great importance, as the region's deep water biota have been barely studied (Macpherson 2003; Castro 2005; Ahyong & Galil 2006; Cleva & Crosnier 2006). This paper presents the deep-water Calappidae, Matutidae and Leucosiidae collected off the Solomon Islands by the SALOMON 1 and 2 expeditions. The collection included 19 species, of which 18 constitute new records for the Solomons, and one, Euclosia vella n. sp., is new to science. The new species is described and illustrated. The type material is deposited in the MNHN.

ABBREVIATIONS

cl carapace length, measured along the vertical

median line of the carapace;

juv. juvenile; stn station;

MNHN Muséum national d'Histoire naturelle, Paris.

SYSTEMATICS

Family CALAPPIDAE de Haan, 1833 Genus *Calappa* Weber, 1795

Calappa pustulosa Alcock, 1896

MATERIAL EXAMINED. — SALOMON 2, stn CP 2295, 8°46.8'S, 157°30.6'E, Telepare, 94-133 m, XI.2004, 1 σ cl 12.3 mm (MNHN B.30213). — Stn CP 2296, 8°46.4'S, 157°29.7'E, Telepare, 124-139 m, XI.2004, 1 σ cl 11.7 mm (MNHN B.30214).

DISTRIBUTION. — India, Philippines, China, Japan, 40-165 m (Galil 1997), new record for the Solomons.

Genus Mursia Desmarest, 1823

Mursia longispina Crosnier, 1997

MATERIAL EXAMINED. — SALOMON 2, stn CP 2284, 8°38.4'S, 157°21.5'E, Rendova, 195-197 m, XI.2004, 1 σ cl 40.0 mm, 1 9 cl 30.3 mm (MNHN B.30215). — Stn CP 2287, 8°40.84'S, 157°24.6'E, Rendova, 253-255 m, XI.2004, 2 σσ cl 12.8 and 14.1 mm, 1 juv. (MNHN B.30216).

DISTRIBUTION. — Previously known only from New Caledonia, 250-397 m (Crosnier 1997), new record for the Solomons.

Genus Paracyclois Miers, 1886

Paracyclois milneedwardsi Miers, 1886

MATERIAL EXAMINED. — SALOMON 2, stn CP 2286, 8°40.9'S, 157°24.0'E, Rendova, 248-253 m, 6.XI.2004, 1 of cl 16.9 mm (MNHN B.30217).

DISTRIBUTION. — Japan, Taiwan, South China Sea, Philippines, Admiralty Is., 80-349 m (Williams & Child 1988; Chen & Sun 2002), new record for the Solomons.

Family MATUTIDAE de Haan, 1833 Genus *Izanami* Galil & Clark, 1994

Izanami curtispina (Sakai, 1961)

MATERIAL EXAMINED. — SALOMON 2, stn DW 2234, 6°51.4′S, 156°23.8′E, Oldham Deep, 182-277 m, XI.2004, 1 σ cl 22.3 mm, 2 ♀♀ cl 18.7 and 19.3 mm (MNHN B.30218). — Stn DW 2235, 6°50.9′S, 156°23.3′E, 162-196 m, XI.2004, 1 σ cl 20.4 mm, 1 ♀ cl 18.9 mm (MNHN B.30219). — Stn DW 2239,

6°53.9'S, 156°21.4'E, S Taylor Reefs, 460-730 m, XI.2004, 1 ♀ cl 18.5 mm (MNHN B.30220).

DISTRIBUTION. — Madagascar, China Sea, Japan, Arafura Sea, Taiwan, 35-217 m (Galil & Clark 1994; Ng *et al.* 2001; Chen & Sun 2002), new record for the Solomons and significant extension of the depth record.

Family LEUCOSIIDAE Samouelle, 1819 Genus Arcania Leach, 1817

Arcania cornuta (MacGilchrist, 1905)

Material Examined. — SALOMON 2, stn CP 2262, 7°56.4'S, 156°51.2'E, Vella Gulf, 460-487 m , XI.2004, 2 ♂ ♂ cl 32.8, 34.7 mm (MNHN B.30164).

DISTRIBUTION. — Fiji Is., New Caledonia, Japan, China, Taiwan, Philippines, Vietnam, Persian Gulf, Madagascar, Mozambique Channel, 86-300 m (Galil 2001b), new record for the Solomons and significant extension of the depth record.

Arcania gracilis (Henderson, 1893)

MATERIAL EXAMINED. — SALOMON 1, stn CP 1810, 9°47.7'S, 160°50.5'E, 53 m, 1.X.2001, 1 \(\text{cl} \) cl 6.0 mm (MNHN B.30165).

SALOMON 2, stn CP 2284, 8°38.4'S, 157°21.5'E, Rendova, 195-197 m, XI.2004, 2 o o cl 9.4, 9.5 mm (MNHN B.30166).

DISTRIBUTION. — Vanuatu, New Caledonia, Australia, Indonesia, Philippines, Japan, China, Taiwan, Singapore, India, Sri Lanka, Laccadives, Persian Gulf, Madagascar, Red Sea, 21-366 m (Galil 2001b), new record for the Solomons.

Arcania undecimspinosa de Haan, 1841

MATERIAL EXAMINED. — SALOMON 2, stn CP 2287, 8°40.8'S, 157°24.6'E, Rendova, 253-255 m, XI.2004, 1 σ cl 12.5 mm (MNHN B.30167).

DISTRIBUTION. — Marquesas Is., Loyalty Is., Australia, Japan, Korea, China, Hong Kong, Taiwan, Philippines, India, Andamans, Seychelles, Mascarene Basin, South Africa, 14-420 m (Galil 2001b) and new record for the Solomons.

Genus Euclosia Galil, 2003

Euclosia vella n. sp. (Figs 1; 2)

Type Material. — Holotype: SALOMON 2, stn CP 2262, 7°56.4'S, 156°51.2'E, Vella Gulf, 460-487 m, XI.2004, σ cl 20.1 mm (MNHN B.30223); paratypes: same data as holotype, 1 ovigerous $\mathfrak P$ cl 22.1 mm, 2 juvs (MNHN B.30224).

ETYMOLOGY. — Named after the type locality, used as noun.

DISTRIBUTION. — Known only from the type locality, Solomon Islands.

DESCRIPTION

Carapace subpentagonal, globose; regions of carapace indistinct. Dorsal surface of carapace glabrous, shiny, smooth, delicately and sparsely punctate. Frontal region produced, upcurved, laterally concave. Frontal margin medially dentate, deflexed. Antennular fossa sealed by basal antennular segment. Antennae short, inserted between antennular fossa and orbit. Orbit small, rounded, outer orbital margin unsutured, anterior margin of efferent branchial channel forms part of lower orbital margin. Eyes retractable. External maxillipeds concealing trapezoid buccal opening; endopod merus triangulate, as long as ischium; in female, endopod with setose fringe lengthwise. Anterolateral margin of carapace weakly convex along hepatic region, beaded. Lateral angle of carapace rounded, overhanging thoracic sinus, margin prominently beaded. Thoracic sternites smooth. Margin of thoracic loop visible in dorsal view. Pterygostomian region smooth, with deep crescentic indentation posteriorly. Loop-shaped anterior margin of thoracic sinus with coalescent granules; row of perliform granules above cheliped basis, median granules largest. Posterolateral margins of carapace rounded, granulate, granules smaller, further apart posteriorly. Epimeral margin closely beaded, invisible in dorsal view, continuous with posterior margin. Posterior margin sinuous in male, rounded in female. Chelipeds subequal, robust, long, longer in adult male than in female specimens. Cheliped merus tubular, bearing prominent perliform tubercles on anterior, posterior margins, upper surface bearing coalesced cluster of 6-8 granules proximally, followed



Fig. 1. — Euclosia vella n. sp., holotype & cl 20.1 mm, Solomon Is., Vella Gulf, SALOMON 2, stn CP 2262: **A**, dorsal view of carapace; **B**, ventral view of carapace.

by two diverging rows of tubercles, distally smooth; lower surface coarsely tuberculate anteriorly, pitted proximally. Carpus inflated, bearing row of granules on inner margin. Propodus rounded, smooth, but for two rows of granules on lower surface, continuing to proximal part of pollex. Fingers as long as propodus, inner margins serrate. Pereiopods slender, short.

Pereiopodal meri bearing lines of obsolescent granules on dorsal and ventral surfaces; last pereiopodal propodus keeled dorsally, ventrally. Dactyli longer than propodi, lanceolate. Male abdominal sulcus deep, elongate, nearly reaching buccal cavity; its lateral margin bearing distinct ridge fitting into suture between abdominal segments. Male abdomen with 1st segment narrow, 2nd segment spindle-shaped, minute; segments 3-5 fused, vertically furrowed proximally; 6th segment bearing denticle medially; telson triangular, a third as long as 6th segment. Female abdomen with first 2 segments narrow, arched; segments 3-6 fused, greatly enlarged, shield-like, telson laciniate. First male pleopod elongate, shaft stout, sinuous, tightly coiled three times on

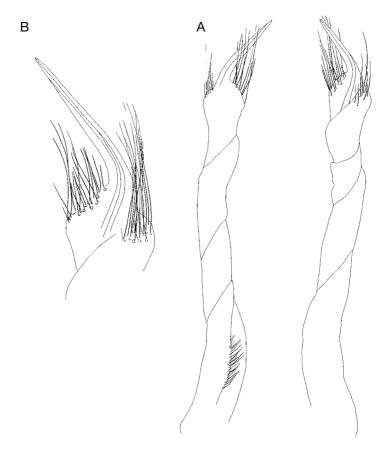


Fig. 2. — Euclosia vella n. sp., holotype & cl 20.1 mm, Solomon Is., Vella Gulf, SALOMON 2, stn CP 2262: **A**, first male pleopod; **B**, distal end of first male pleopod.

itself, bearing ruff of setae preapically, apical process cornute, digitate, slender, acuminate. Second male pleopod short, curved, apex scoop-like.

Colour (in alcohol)

Dorsum dull brown, paler posteriorly, ventrally carapace ivory-coloured. Perliform tubercles on upper surface of cheliped merus pale, ringed with orange, tubercles on lower surface ivory coloured; fingers proximally pale orange, distally white. Pereiopodal meri subdistally orange; carpi, propodi, dactyli ringed with orange proximally.

REMARKS

Euclosia vella n. sp. shares with Euclosia exquisita (Galil 2003b), E. tornatilia (Galil 2003b), and

E. unidentata (de Haan, 1841), a unidentate frontal margin and a crescentic indentation on the pterygostomian region anterior to thoracic sinus. The new species is readily distinguished from the Madagascan E. exquisita in its delicately and sparsely punctuate dorsal surface of carapace, and digitate, rather than hook-like, apical process of male 1st pleopod. Euclosia vella n. sp. shares with the Australian E. tornatilia, and the East Asian E. unidentata, a slender apical process of male 1st pleopod, but it is of a much smaller size, and lacks the three and two pairs of reddish ocelli, respectively, decorating the gastric region of the latter species.

The present finding constitutes a record depth for any *Euclosia* species (Galil 2003b).

Genus Iphiculus Adams & White, 1848

Iphiculus spongiosus Adams & White, 1848

MATERIAL EXAMINED. — SALOMON 2, stn CP 2284, 8°38.4'S, 157°21.5'E, Rendova, 195-197 m, XI.2004, 3 ♀♀ cl 10.7-1.5 mm, 2 juvs (MNHN B.30221).

DISTRIBUTION. — Arafura Sea, Indonesia, Philippines, China Sea, Japan, Gulf of Thailand, Singapore, Bay of Bengal, Red Sea, 11-177 m (Chen 1989; Chen & Sun 2002), new record for the Solomons.

Genus Myra Leach, 1817

Myra elegans Bell, 1855

MATERIAL EXAMINED. — SALOMON 2, stn CP 2262, 7°56.4'S, 156°51.2'E, Rendova, 460-487 m, XI.2004, 2 ♂♂ cl 11.0, 11.3 mm, 1 ovigerous ♀ cl 12.6 mm (MNHN B.30168). — Stn CP 2280, 8°38.2'S, 157°21.5'E, Rendova, 195-200 m, XI.2004, 1 juv. (MNHN B.30169). — Stn CP 2282, 8°36.7'S, 157°21.0'E, Rendova, 150-160 m, XI.2004, 1 ♂ cl 11.1 mm, 3 ovigerous ♀♀ cl 12.4, 13.3 mm, 1 juv., (MNHN B.30170).

DISTRIBUTION. — Australia, Papua New Guinea, Indonesia, Philippines, South China Sea, Gulf of Thailand, Myanmar, Bay of Bengal, 5-187 m (Galil 2001c), new record for the Solomons and significant extension of the depth record.

Genus Pariphiculus Alcock, 1896

Pariphiculus coronatus (Alcock & Anderson, 1894)

MATERIAL EXAMINED. — SALOMON 1, stn CP 1801, 9°25.0'S, 160°25.9'E, 264-273 m, 1.X.2001, 1 σ cl 15.9 mm (MNHN B.30171).

DISTRIBUTION. — Indonesia, Philippines, China Sea, Vietnam, Japan, Bay of Bengal, Persian Gulf, Red Sea, 26-250 m (Tan 1996; Chen & Sun 2002), new record for the Solomons.

Pariphiculus mariannae (Herklots, 1852)

MATERIAL EXAMINED. — SALOMON 2, stn CP 2282, 8°36.7'S, 167°21.0'E, Rendova, 150-160 m, XI.2004, 1 σ cl 14.9 mm (MNHN B.30172).

DISTRIBUTION. — Indonesia, Philippines, South China Sea, Myanmar, India, Arabian Sea, 26-180 m (Tan 1996; Tirmizi & Kazmi 1988; Chen & Sun 2002), new record for the Solomons.

Genus Parilia Wood-Mason, 1891

Parilia major Sakai, 1961

MATERIAL EXAMINED. — SALOMON 1, stn CP 1801, 9°25.0'S, $160^{\circ}25.9$ 'E, 264-273 m, 1.X.2001, 6 $\sigma\sigma$ cl 39.9-59.4 mm, 5 ovigerous 99 cl 40.5-47.2 mm (MNHN B.30173).

DISTRIBUTION. — Indonesia, Philippines, Japan, Taiwan, 100-425 m (Chen & Sun 2002), new record for the Solomons.

Genus Raylilia Galil, 2001

Raylilia mirabilis (Zarenkov, 1969)

MATERIAL EXAMINED. — SALOMON 1, stn DW 1758, 8°49.2'S, 159°52.2'E, 180-187 m, 26.IX.2001, 1 σ cl 6.5 mm (MNHN B.30174). — Stn DW 1822, 9°51.8'S, 160°51.8'E, 51-54 m, 3.X.2001, 1 σ cl 6.9 mm, 1 \circ cl 9.2 mm (MNHN B.30175).

DISTRIBUTION. — New Caledonia, Chesterfield Islands, South China Sea, Torres Straits, New Guinea, Philippines, 26-87 m (Galil 2001a), new record for the Solomons and significant extension of the depth record.

Genus *Tanaoa* Galil, 2003

Tanaoa distinctus (Rathbun, 1893)

Material examined. — Salomon 1, stn CP 1793, 9°13.4'S, $160^{\circ}07.8$ 'E, 505-510 m, 30.IX.2001, 1 σ cl 24.6 mm (MNHN B.30176). — Salomon 2, stn CP 2175, 9°05.8'S, $158^{\circ}59.9$ 'E, SW Russel, 579-585 m, XI.2004, 1 σ cl 20.5 mm (MNHN B.30177). — Stn CP 2213, 7°38.7'S, $157^{\circ}42.9$ 'E, NW Isabel, 495-650 m, XI.2004, 1 $\,^{\circ}$ cl 20.3 mm (MNHN B.30178). — Stn CP 2228, $6^{\circ}34.7$ 'S, $156^{\circ}10.5$ 'E, Choiseul, 609-625 m, XI.2004, 1 $\,^{\circ}$ cl 30.2 mm (MNHN B.30179).

DISTRIBUTION. — Marquesas Is., Tuamotu Archipelago, Society Is., Hawaiian Is., Samoa, Banc Tuscarora, Wallis Is., New Zealand, Guam, 27-805 m (Galil 2003a), new record for the Solomons.

Tanaoa nanus Galil, 2003

MATERIAL EXAMINED. — SALOMON 1, stn CP 1748, 9°20.4'S, 159°58.2'E, 509-522 m, 25.IX.2001, 1 σ cl 14.6 mm (MNHN B.30180). — Stn CP 1783, 8°32.8'S, 160°41.7'E, 399-700 m, 9.IX.2001, 1 σ cl 13.8 mm, 1 \circ cl 11.7 mm (MNHN B.30181). — Stn CP 1793, 9°13.4'S, 160°07.8'E, 505-510 m, 30.IX.2001, 2 $\sigma\sigma$ cl 11.7 and 14.8 mm, 1 ovigerous \circ cl 17.3 mm (MNHN B.30182). — Stn CP 1794, 9°16.1'S, 160°07.7'E, 494-504 m, 30.IX.2001, 2 $\sigma\sigma$ cl 16.4, 17.3 mm, 1 ovigerous \circ cl 17.6 mm (MNHN B.30183). — Stn CP 1796, 9°19.2'S, 160°25.4'E, 469-481 m, 1.X.2001, 1 σ cl 10.9 mm (MNHN B.30184). — Stn CP 1798, 9°21.0'S, 160°29.2'E, 513-564 m, 1.X.2001, 2 $\sigma\sigma$ cl 10.8 and 15.1 mm, 1 ovigerous \circ cl 15.0 mm (MNHN B.30185).

SALOMON 2, stn CP 2260, 8°03.5'S, 156°54.5'E, Vella Gulf, 399-427 m, XI.2004, 1 & cl 13.9 mm, 1 ovigerous ♀ cl 16.1 mm (MNHN B.30195). — Stn CP 2184, 8°16.9'S, 159°59.7'E, SE Santa Isabel, 464-523 m, XI.2004, 5 ♂♂ cl 13.9-17.2 mm, 3 ♀♀ cl 16.2-17.9 mm (MNHN B.30186). — Stn CP 2186, 8°17.0'S, 160°0.0'E, SE Santa Isabel, 487-541 m, XI.2004, 5 & d cl 14.0-16.2 mm, 1 ovigerous 9 cl 17.6 mm, 1 9 cl 14.7 mm (MNHN B.30187). — Stn CP 2187, 8°17.5'S, 159°59.8'E, SE Santa Isabel, 464-523 m, XI.2004, 2 of of cl 14.8 and 15.1 mm, 1 ovigerous ♀ cl 15.5 mm (MNHN B.30188). — Stn CP 2194, 8°24.8'S, 159°26.7'E, SW Santa Isabel, 440-521 m, XI.2004, 1 ♂ cl 13.4 mm, 1 ovigerous ♀ cl 14.3 mm, 1 juv. (MNHN B.30189). — Stn CP 2195, 8°25.5'S, 159°26.4'E, SW Santa Isabel, 543-593 m, 24.X.2004, 1 of cl 13.7 mm (MNHN B.30190). — Stn CP 2226, 6°39.0'S, 156°14.3'E, Choiseul, 490-520 m, XI.2004, 3 ♂♂ cl 14.5-15.2 mm (MNHN B.30191). — Stn CP 2227, 6°37.2'S, 156°12.7'E, Choiseul, 508-522 m, XI.2004, 3 ♂♂ cl 14.8-16.9 mm (MNHN B.30192). — Stn CP 2228, 6°34.7'S, 156°10.5'E, Choiseul, 609-625 m, XI.2004, 1 ♂ cl 17.4 mm (MNHN B.30193). — Stn CP 2243, 7°42.9'S, 156°27.3'E, 518-527 m, XI.2004, 2 & d cl 13.6 and 13.7 mm, 1 ♀ cl 11.2 mm (MNHN B.30194). — Stn CP 2263, 7°54.8'S, 156°51.3'E, Vella Gulf, 485-520 m, XI.2004, 3 ♂ ♂ cl 12.6-13.6 mm, 1 ovigerous ♀ cl 14.7 mm, 1 ♀ cl 14.6 mm (MNHN B.30196).

DISTRIBUTION. — Wallis Is., Vanuatu, New Caledonia, Indonesia, 281-1250 m (Galil 2003a), new record for the Solomons.

Genus *Tokoyo* Galil, 2003 *Tokoyo cirrata* Galil, 2003

MATERIAL EXAMINED. — SALOMON 2, stn CP 2284, 8°38.4'S, 157°21.5'E, Rendova, 195-197 m, XI.2004, 1 σ cl 13.5 mm, 3 ovigerous ♀♀ cl 10.9-14.5 mm, 1 ♀ cl 11.4 mm (MNHN B.30197).

DISTRIBUTION. — Vanuatu and Australia, 36-215 m (Galil 2003a), new record for the Solomons.

Genus Toru Galil, 2003

Toru pilus (Tan, 1996)

MATERIAL EXAMINED. — SALOMON 1, stn DW 1776, 8°20.7'S, $160^{\circ}40.7$ 'E, 295-381 m, 29.IX.2001, $1\ \sigma$ cl 12.5 mm (MNHN B.30198). — Stn CP 1800, 9°21.4'S, $160^{\circ}23.9$ 'E, 357-359 m, 1.X.2001, $1\ Q$ cl 8.9 mm, 1 juv. (MNHN B.30199). — Stn CP 1801, 9°25.0'S, $160^{\circ}25.9$ 'E, 264-273 m, 1.X.2001, $1\ \sigma$ cl 11.10 mm (MNHN B.30200). — Stn CP 1837, $10^{\circ}12.8$ 'S, $161^{\circ}28.6$ 'E, 381-383 m, 5.X.2001, $1\ \sigma$ cl 11.0 mm (MNHN B.30201). — Stn CP 1851, $10^{\circ}27.6$ 'S, $162^{\circ}00.0$ 'E, 297-350 m, 6.X.2001, $1\ \sigma$ cl 12.3 mm (MNHN B.30202). — Stn CP 1860, $9^{\circ}22.0$ 'S, $160^{\circ}31.0$ 'E, 620 m, 7.X.2001, $2\ \sigma$ cl 11.6 and 11.9 mm, $1\ \text{ovigerous}\ Q\ \text{cl}\ 12.4$ mm, $2\ Q\ \text{cl}\ 9.0$ and $9.1\ \text{mm}$ (MNHN B.30203).

SALOMON 2, stn CP 2210, 7°34.2'S, 157°41.8'E, NW Santa Isabel, 240-305 m, XI.2004, 1 σ cl 11.5 mm (MNHN B.30204).

DISTRIBUTION. — Fiji, Vanuatu, New Caledonia, Philippines, 234-500 m (Galil 2003a), new record for the Solomons and significant extension of the depth record.

Toru septimus Galil, 2003

Material examined. — Salomon 1, stn CP 1802, 9°31.1'S, $160^\circ35.0$ 'E, 245-269 m, 2.X.2001, 2 σ c of 12.1, 12.4 mm (MNHN B.30207). — Stn CP 1860, 9°22.0'S, $160^\circ31.0$ 'E, 620 m, 7.X.2001, 1 σ of 12.0 mm (MNHN B.30211).

SALOMON 2, stn CP 2286, Rendova, 8°40.9'S, 157°24.0'E, 248-253 m, XI.2004, 1 σ cl 12.6 mm (MNHN B.30212). — Stn CP 2287, Rendova, 8°40.8'S, 157°24.6'E, 253-255 m, XI.2004, 1 σ cl 13.1 mm (MNHN B.30208).

DISTRIBUTION. — Tonga, Fiji, New Caledonia, Loyalty Is., Vanuatu, 200-648 m (Galil 2003a), new record for the Solomons.

Genus Urashima Galil, 2003

Urashima pustuloides (Sakai, 1961)

MATERIAL EXAMINED. — SALOMON 1, stn CP 1800, 9°21.4'S, 160°23.9'E, 357-359 m, 1.X.2001, 2 \$\frac{9}{2}\$ cl

37.0 and 37.1 mm (MNHN B.30209). SALOMON 2, stn CP 2273, 8°31.8'S, 157°42.8'E, 732-839 m, 5.XI.2004, 1 \(\text{Q} \) cl 12.7 mm (MNHN B.30210).

DISTRIBUTION. — Japan, Taiwan, Philippines, Indonesia, Australia, 85-468 m (Galil 2003a), new record for the Solomons and significant extension of the depth record.

Acknowledgements

I thank Alain Crosnier (MNHN) for generous and jovial hospitality, and Régis Cleva (MNHN) for kind assistance. Paul F. Clark (The Natural History Museum, London) helped with the references. This research received support from the SYNTHESYS Programme.

REFERENCES

- AHYONG S. T. & GALIL B. S. 2006. Polychelidae from the southern and western Pacific (Decapoda, Polychelida). *Zoosystema* 28 (3): 757-767.
- BLABER S. J. M. & MILTON D. A. 1990. Species composition, community structure and zoogeography of fishes of mangrove estuaries in the Solomon Islands. *Marine Biology* 105: 259-267.
- Bruce A. J. 1980. Some Pontoniine shrimps from the Solomon Islands. *Micronesica* 16 (2): 261-269.
- CASTRO P. 2005. Crabs of the subfamily Ethusinae Guinot, 1977 (Crustacea, Decapoda, Brachyura, Dorippidae) of the Indo-West Pacific region. *Zoosystema* 27 (3): 499-600.
- CHALLIS D. A. 1969. An ecological account of the marine interstitial opisthobranchs of the British Solomon Islands Protectorate. *Philosophical Transactions* of the Royal Society B 255: 527-539.
- CHEN H. 1989. Leucosiidae (Crustacea, Brachyura), in FOREST J. (ed.), Résultats des campagnes MUS-ORSTOM, volume 5. Mémoires du Muséum national d'Histoire naturelle sér. A, 144: 181-263.
- CHEN H. & SUN H. 2002. Brachyura: marine primitive crabs, in Fauna Sinica Invertebrata: Arthropoda: Crustacea 30. Science Press, Beijing, xiii + 597 p., 237 figs, 6 pls.
- CLEVA R. & CROSNIER A. 2006. Heterocarpus tenuidentatus a new species of shrimp from the Solomon Islands (Crustacea, Decapoda, Caridea, Pandalidae). Zootaxa 1200: 61-68.
- CROSNIER A. 1997. Une nouvelle espèce de Mursia de Nouvelle-Calédonie (Crustacea, Decapoda, Brachyura, Calappidae). Zoosystema 19 (1): 151-158.
- GALIL B. S. 1997. A revision of the Indo-Pacific species

- of *Calappa* Weber, 1795 (Crustacea: Brachyura: Calappidae), *in* CROSNIER A. (ed.), Résultats des campagnes MUSORSTOM, volume 18. *Mémoires du Muséum national d'Histoire naturelle* 176: 217-335.
- GALIL B. S. 2001a. A new genus and species of leucosiid crabs (Crustacea, Decapoda, Brachyura) from the Indo-Pacific Ocean. Zoosystema 23 (1): 65-75.
- Galil B. S. 2001b. A revision of the genus *Arcania* Leach, 1817 (Brachyura, Decapoda: Leucosioidea). *Zoologische Mededelingen* 75 (11): 169-206.
- GALIL B. S. 2001c. A revision of Myra Leach, 1817 (Brachyura, Decapoda: Leucosioidea). Zoologische Mededelingen 75 (24): 409-446.
- GALIL B. S. 2003a. Four new genera of leucosiid crabs (Crustacea: Brachyura: Leucosiidae) for three new species and nine species previously in the genus *Randallia* Stimpson, 1857, with a redescription of the type species, *R. ornata* (Randall, 1939). *Proceedings of the Biological Society of Washington* 116 (2): 395-422.
- GALIL B. S. 2003b. Contribution to the knowledge of Leucosiidae II. *Euclosia* gen. nov. (Crustacea: Brachyura). *Zoologische Mededelingen* 77 (20): 331-347.
- GALIL B. S. & CLARK P. F. 1994. A revision of the genus *Matuta* Weber, 1795 (Crustacea: Brachyura: Calappidae). *Zoologische Verhandelingen* 294: 1-55.
- GIBBS P. E. 1971. The polychaete fauna of the Solomon Islands. *Bulletin of the British Museum* (Natural History) 21: 99-211.
- GOGGIN L. 2004. Solomon Islands: a marine life survey. *Tropical Conservancy* 5 (4): 8-11.
- MACPHERSON E. 2003. Some lithodid crabs (Crustacea: Decapoda: Lithodidae) from the Solomon Islands (SW Pacific Ocean), with the description of a new species. *Scientia Marina* 67 (4): 413-418.
- MILLER M. C. 1969. The habits and habitats of the opisthobranch mollusks of the British Solomon Islands. *Philosophical Transactions of the Royal Society* B 255: 459-516.
- MORRISEY D. J., COLE R. G., BELL J., LANE I. & READ G.B. 2003. Low abundances and diversities of benthic faunas of shallow, coastal sediments in the Solomon Islands and their implications for assessing environmental impacts of logging. *Pacific Conservation Biology* 9: 15-27.
- NG P. K. L., WANG C.-H., HO P.-H. & SHIH H.-T. 2001. An annotated checklist of brachyuran crabs from Taiwan (Crustacea: Decapoda). *National Taiwan Museum Special Publication Series* 11: 1-86.
- TAN C. G. S. 1996. Leucosiidae of the *Albatross* expedition to the Philippines, 1907-1910 (Crustacea: Brachyura: Decapoda). *Journal of Natural History* 30: 1021-1058.
- TIRMIZI N. M. & KAZMI Q. B. 1988. Crustacea:

Brachyura (Dromiacea, Archaeobrachyura, Oxystomata, Oxyrhyncha). Marine Fauna of Pakistan 4. 1. Institute of Marine Sciences, University of Karachi, BCCI Foundation Chair Publication, Karachi, 244 p.

WILLIAMS A. B. & CHILD C. A. 1988. — Comparison of some genera and species of box crabs (Brachyura:

Calappidae), southwestern north Atlantic, with description of a new genus and species. *Fishery Bulletin* 87: 105-121.

WOLFF T. 1969. — The fauna of Rennell and Bellona, Solomon Islands. *Philosophical Transactions of the Royal Society* B 255: 321-343.

Submitted on 16 August 2006; accepted on 9 March 2007.